

FURTHER NOTES ON THE *DEUDORIX AFFINIS* GROUP IN THE SOUTH PACIFIC (LEPIDOPTERA: LYCAENIDAE)

W. JOHN TENNENT

Biogeography and Conservation Laboratory, Department of Entomology, The Natural History Museum, London SW7 5BD, UK

(address for correspondence: 38 Colin McLean Road, Dereham, Norfolk NR19 2RY, England)

Abstract

A female specimen of an unidentified species of *Deudorix* Hewitson, belonging to the *affinis* group, is reported from the Solomon Islands and briefly compared with described taxa. *D. democles* Miskin, *D. affinis* Rothschild, *D. eagon* Tennent and *D. wabens* Tennent are illustrated. A map showing source localities of the few *affinis*-group specimens known from the southwest Pacific is provided.

Discussion

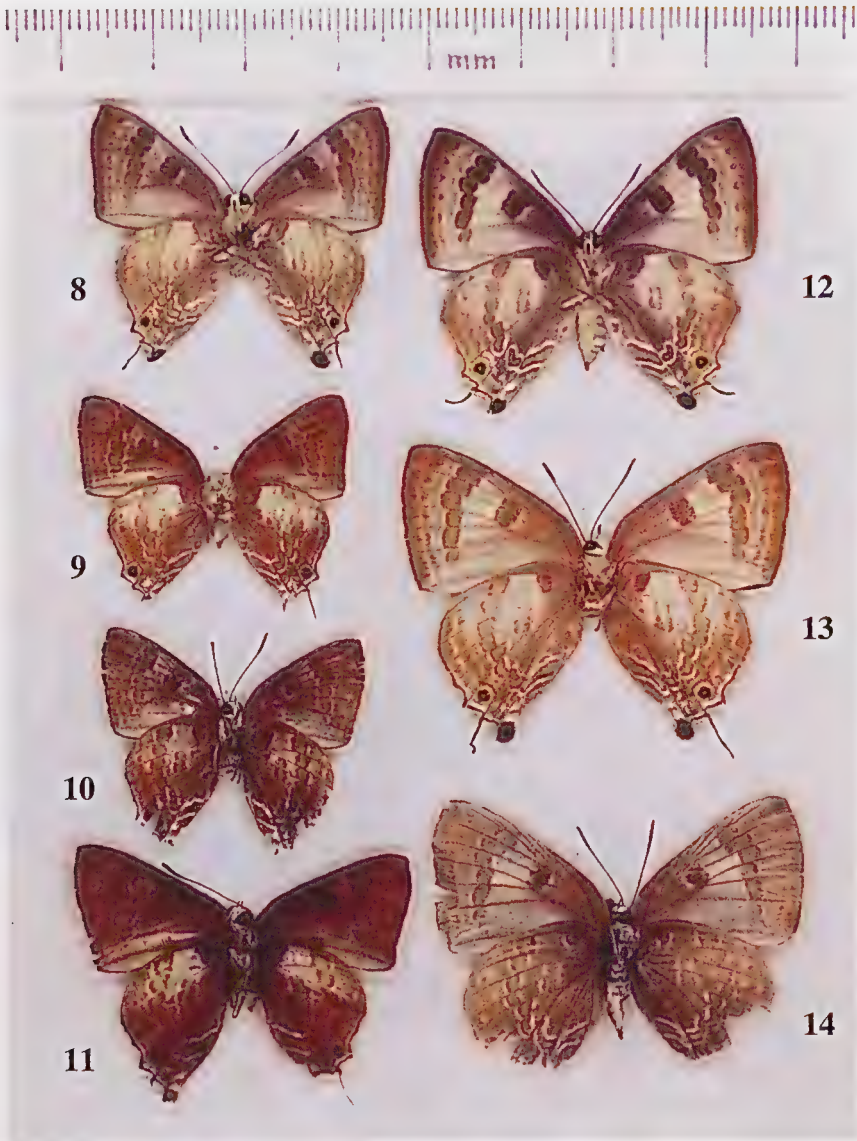
In a previous paper (Tennent 2000), the author described two new species of *Deudorix* Hewitson (subgenus *Virachola* Moore) from the Solomon Islands. These are *D. eagon* Tennent (Choiseul) (Figs 3, 10) and *D. wabens* Tennent (Guadalcanal) (Figs 4, 11). It was pointed out that evidence for historical association of a male *Deudorix* from the Louisiades (Figs 2, 9) with the female holotype of *D. affinis* Rothschild, 1915 (Figs 6, 13) from Dampier I., Papua New Guinea, was inconclusive.

In April 2001, on Rendova Island (New Georgia group), Solomon Islands, a female *Deudorix* (Figs 7, 14) was collected feeding at the flowers of a *Mikania* species (Asteraceae). Both dorsal and ventral surfaces of this specimen clearly place it with the *affinis* group but, like the male associated with *D. affinis*, the specimen cannot be assigned with certainty to any described species. Although worn, it can be seen that the specimen has rather less blue on the upperside than either *D. affinis* or *D. democles* Miskin, 1884 (Figs 5, 6) and that the shade of the blue is closer to that of the male *D. wabens* (Fig. 4) than to other taxa. The underside is less white than females of *D. democles* or *D. affinis* (Figs 12, 13) and the hind wing median markings are notably less regular. The specimen has been deposited in The Natural History Museum (BMNH), London.

Few specimens of 'blue' *Deudorix* are known from the south Pacific, although the group is clearly widespread. It has been suggested (Tennent 2000) that a possible reason for the paucity of material in collections may be due to the habit of adults in frequenting the forest canopy. It is noted that between 1884 and 1938, *D. democles* was known from only three males in Australia (Waterhouse 1938, Ted Edwards, pers. comm.). Discovery of its biology - larvae feed inside the fruits of *Strychnos* (Loganiaceae) (Braby 2000) - provided further specimens and it was subsequently realised that the butterfly is very common in Queensland from near Townsville to almost as far north as Cape York (Ted Edwards, pers. comm.).



Figs 1-7. *Deudorix* species, uppersides. (1) *D. democles* male (Coen River, Qld); (2) *D. affinis* male (Sudest I.); (3) *D. eagon* holotype male (Choiseul); (4) *D. wabens* holotype male (Guadalcanal); (5) *D. democles* female (Coen River, Qld); (6) *D. affinis* holotype female (Dampier I.); (7) *Deudorix* sp. female (Rendova).



Figs 8-14. *Deudorix* species, undersides. (8) *D. democles* male (Coen River, Qld); (9) *D. affinis* male (Sudest I.); (10) *D. eagon* holotype male (Choiseul); (11) *D. wabens* holotype male (Guadalcanal); (12) *D. democles* female (Coen River, Qld); (13) *D. affinis* holotype female (Dampier I.); (14) *Deudorix* sp. female (Rendova).

The reasons for the earlier perceived rarity of *D. democles* (it was not reported by F. P. Dodd during his time in Queensland) are not certain, but it is clear that knowledge of the species' life history held the key.

Females of *D. eagon* and *D. wabens* (and possibly also of the male usually associated with *D. affinis*) are not known and it remains to be seen whether the Rendova female reported here belongs with any of these males, or whether it represents another undescribed taxon. In order to assist future comparisons, relevant taxa are illustrated, together with a map (Fig. 15) showing source localities. *D. eagon* is illustrated here in colour for the first time.

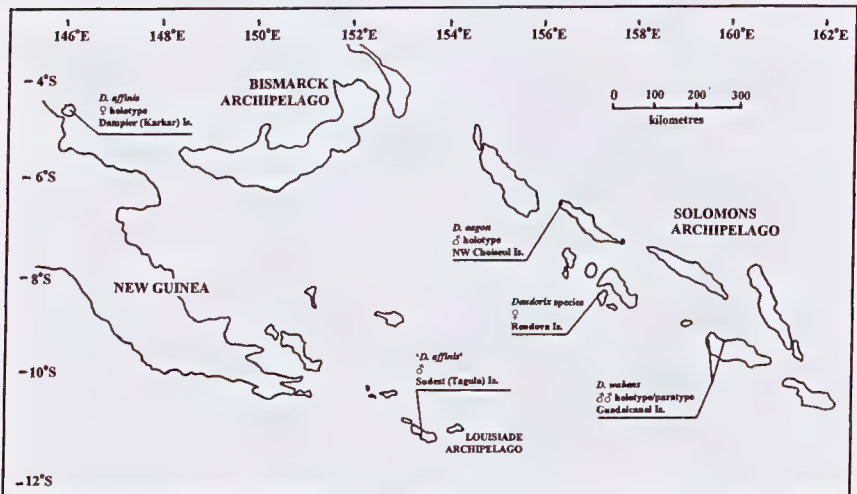


Fig. 15. Localities for *Deudorix affinis* group species in the southwest Pacific.

Acknowledgment

Ted Edwards, CSIRO Canberra, kindly presented the author with the pair of *D. democles* illustrated (now in the BMNH) and provided helpful details on the present status of *D. democles* in Australia.

References

- BRABY, M.F. 2000. *Butterflies of Australia. Their identification, biology and distribution*. CSIRO Publishing, Canberra. 2 volumes; xx+vii+976 pp.
- TENNENT, W.J. 2000. Notes on *Deudorix* Hewitson in the Solomon Islands, the Bismarck Archipelago and New Guinea, with description of nine new taxa (Lepidoptera: Lycaenidae). *Australian Entomologist* 27(1): 9-26.
- WATERHOUSE, G.A. 1938. Notes on Australian butterflies in the Australian Museum. *Records of the Australian Museum* 20: 217-222.